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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,995	02/12/2002	Shigeki Kobayashi	219467US0X	5089
22850	7590	01/30/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			HU, HENRY S	
			ART UNIT	PAPER NUMBER
			1713	

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action	Application No.	Applicant(s)	
	10/072,995	KOBAYASHI ET AL.	
	Examiner	Art Unit	
	Henry S. Hu	1713	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 05 January 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ they raise the issue of new matter (see Note below);
 - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 1-20.

Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☐ Other: _____

H. 1.183
1-22-2004

[Signature]
DAVID W. WU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

Continuation of 2. NOTE: The change from "a halogen acid salt YXO₃/a sulfite Z₂SO₃, wherein X is a chlorine atom, a bromine atom, or an iodine atom, Y is a hydrogen atom, ammonium, an alkali metal or an alkaline earth metal, and Z is ammonium, an alkali metal or an alkaline earth metal" to "potassium bromate/ammonium sulfite" does not place the application for allowance after final action because:

(A) The amended parent Claim 1 raises a new issue although the examiner has confirmed it has a support on the original Claims 4 and as well as from specification. The new scope is regarding a binary redox system containing one specific species on each genus as originally claimed in Claim 1. It is very likely that the use of "ammonium" may behave quite different from other metal cations since ammonium is inorganic and is a combination of ammonia base and the proton cation in a close view on the formula.

(B) As discussed in the final rejection, one of the binary systems used by Malhotra is potassium bromate/sodium bisulfite. With new amendment, the limitation of parent Claim 1 in present invention carries a redox binary initiator system of potassium bromate/ammonium sulfite by using an open language "comprising", which does not exclude using uncited component such as acid. This is further evidence by page 10, line 8-14 of the instant specification regarding polymerization has been carried out under an acidic condition by an addition of an acid such as hydrochloric acid. In view of the statement disclosed by Gould as "Bronsted base in either ions or molecules will take on protons to form the species called the conjugated acid of that base" (page 84, paragraph 3), with the addition of acid mentioned in present invention the sulfite ion will certainly add the proton to form the bisulfite ion, which then reads on Malhotra's redox system with only a difference on bisulfite with either ammonium or sodium. Therefore, if ammonium ion behaves just like sodium ion in the course of polymerization process, the present invention would thereby inherently possess the bisulfite ions even with different counter ions. A balanced chemical equation for this reaction can be as following: $\text{Na}_2\text{SO}_3 + \text{HCl} = \text{NaHSO}_3 + \text{NaCl}$ to clearly show the relationship between sulfite and bisulfite ions.

A new consideration and search is thereby required.

In order to support the claimed limitation on binary redox initiator, the examiner suggests that the Applicants would consider submitting some experimental results to show a difference between sodium ion and ammonium ion.

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1-22-2004